"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BESKOV, V.S.; KERNERMAN, V.Sh.; KUZNETSOV, Yu.I.

First All-Union Conference on Modeling and Optimization of Catalytic Processes. Kin.i kat. 4 no.5:795-798 S-O '63. (MIRA 16:12)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

CHESNOKOV, B.B.; SLIN'KO, M.G.; KERNERMAN, V.Sh.

Determination of the critical velocity of gas fluidization under pressure. Khim.prom. no.11:767-768 N '61. (MIRA 15:1)
(Fluidization)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BORESKOV, G.K.; VASILEVICH, L.A.; GUR'YANOVA, R.N.; KERNERMAN, V.Sh.; SLIN'KO, M.G.; FILIPPOVA, A.G.; CHESNOKOV, B.B.

Oxidation of ethylene in a fluidized bed of a catalyst. Kin.i kat. 3 no.2:214-220 Mr-Ap '62. (MIRA 15:11)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR i Fiziko-khimicheskiy institut imeni L.Ya.Karpova.
(Ethylene) (Oxidation) (Fluidization)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

SEMENOV, Vladimir Konstantinovich; YEFREMOV, Yuriy Mikhaylovich; KERNERMAN, Yakov Srulevich; IVNYANYY, Viktor Grigor'yevich; BASYUK, V.N., red.

[Improving the design of cranes] Usovershenstvovanie konstruktsii kranov. Kiev, Budivel'nyk, 1965. 80 p. (MIRA 18:9)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNES, I.Ya., nauchnyy sotrudnik

Vladimir Il'ich Lenin in Moscow. Gor.khoz.Mosk. 34 no.4: 1-3 Ap '60. (MIRA 13:8)

1. Gosudarstvennaya publichnaya istoricheskaya biblioteka.
(Lenin, Vladimir Il'ich, 1870-1924)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNES, I.Ya.; KOTEL'NIKOVA, L.A.; LEMAN, T.R.; SHTUTINA, A.M.; KINKUL'KIN, A.T., retsenzent; KOLOSKOVA, P.P., retsenzent; SEMENKOV, V.N., retsenzent; ITKIN, M.L., red.; MASONOV, Yu.I., red.; ZELENTSOVA, Ye.I., tekhn. red.

[Sociology; recommended list of literature for the aid of the teacher] Obshchestvovedenie; rekomendatel'nyi ukazatel' literatury v pomoshch' uchiteliu. Moskva, Izd-vo Vsesoiuznoi knizhnoi palaty, 1963. 145 p. (MIRA 16:3)

1. Moscow. Gosudarstvennaya publichnaya istoricheskaya biblioteka. 2. Nauchno-bibliograficheskiy otdel Gosudarstvennoy publichnoy istoricheskoy biblioteki (for Kernes, Kotel'nikova, Leman, Shtutina). 3. Zaveduyushchiy sektorom obucheniya istorii Instituta obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR (for Kinkul'kin). 4. Uchitel' sredney shkoly No.204 Timiryazevskogo rayona Moskvy (for Koloskova). 5. Starshiy inspektor Upravleniya prepodavaniya obshchestvennykh nauk Ministerstva vysshego i srednego spetsial'nogo obrazovaniya SSSR (for Semenkov).
(Bibliography--Sociology)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNEYCHUK, G. P.

ROYMER, V.A.; KERNEYCHUK, G.P.

Method of approximation for determining the macrostructure of porous catalysts. Zhur.fiz.khim.28 no.10:1812-1819 O'54. (MLRA 8:2)

1. Akademiya nauk USSR. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo, Kiyev.
(Catalysts)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

5(2) SOV/78-4-10-8/40

AUTHORS: Korneyeva, I. V., Novoselova, A. V.

TITLE: On the Thermal Decomposition of Selenites and Selenates of Zinc and Cadmium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 10, pp 2220-2227 (USSR)

ABSTRACT: The thermal stability of the compounds mentioned in the title is important with respect to the production of luminophoric material and to the glass industry. Since there are no data available in publications on this problem, these compounds were investigated by means of thermographic, thermogravimetric, and X-ray analysis. The initial products corresponded with the composition $ZnSeO_3$; $CdSeO_3$; $ZnSeO_4 \cdot 3H_2O$ and $CdSeO_4 \cdot H_2O$ (Tables 1 and 2). The Debye powder method of analysis was carried out by means of a BSV tube and different cameras of the RKD type. The heating curves were determined by means of the pyrometer of N. S. Kurnakov. The thermal analysis indicates that the selenates of zinc and cadmium are less stable than the selenites and thus behave in an opposite way as compared to the corresponding sulfates and sulfites. The conversion

Card 1/2

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On the Thermal Decomposition of Selenites and Selenates of Zinc and Cadmium

$Se^{4+} \rightarrow Se^{6+}$ is more difficult than the conversion $S^{4+} \rightarrow S^{6+}$: $H_2SeO_3 \rightarrow H_2SeO_4$ requires -1.15 v, whereas for $H_2SO_3 \rightarrow H_2SO_4$ -0.17 v are sufficient. A further difference lies in the nature of the decomposition by temperature influence. While the sulfates decompose according to the equation $MeSO_4 \rightarrow MeO + SO_2 + \frac{1}{2}O_2$, the selenates of Zn and Cd form the corresponding selenites under polymorphic transformations, similar to the selenates of Ba, Sr, Pb. Zinc selenate and zinc selenite yield basic salts on decompcsition. There are 10 figures, 2 tables, and 8 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 12, 1959

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

SOV/137-58-11-23048

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 174 (USSR)

AUTHORS: Tomashov, N. D., Zhuk, N. P., Kernich, N. K.

TITLE: Corrosion Pitting of Stainless Steel (Tochechnaya korroziya nerzhaveyushchey stali)

PERIODICAL: Sb. Mosk. in-t stali, 1958, Vol 38, pp 584-602

ABSTRACT: The tendency of 1Kh18N9T steel towards pitting (P) and the effect of various factors on this type of corrosion were investigated by the method of determination of the piercing potential. It is shown that among the Cl^-, Br^-, F^-, I^- and SO_4^{2-} anions the greatest amount of P is caused by Cl^- and the least by I^-. By means of experiments with aqueous solutions of NaCl of various concentrations (from 0.001 to 5N) it was found that the relationship between the piercing potential of 1Kh18N9T steel and the activity of Cl^- in the solution has a logarithmic character. The character of Na^+, K^+, Ga^{2+}, Mg^{2+}, and Ba^{2+} cations has little effect on the tendency of steel towards P. The effect of the pH value of the medium (0.5N solution of NaCl with additions of HCl or NaOH) varies. The effect of the temperature was investigated in the 3-90°C range. The resistance of

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Chair korrozii metallov, Moskovskogo in-ta stali im Stalina

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

SOV/137-58-11-23048

Corrosion Pitting of Stainless Steel

1Kh18N9T steel to P decreases with the rise in temperature in connection with the increasing rate of the action of Cl^- on the protective oxide film and the decreasing contents of the passivator (O_2) in the solution. The determination of the piercing potential of Cr-Ni steel of six industrial grades showed that Kh18N12M2T steel (2.8% Mo) possesses the greatest resistance to P. Introduction of Nb (Kh18N9M2B steel) lowers its resistance appreciably. An increase in the amount of Ti and C in steel produces similar results. The introduction of Mn into Cr-Ni steel with a simultaneous decrease of its Ni contents reduces greatly the resistance of the steel to P. An increase in Cr content (from 0.2 to 41.5%) increases P resistance. The results of 15 days' comparative corrosion tests by full or intermittent immersion of Cr and Cr-Ni steels in solutions of 0.5N $FeCl_3$ and 0.49N NaCl + 0.01N HCl agree fully with the data obtained by the method of determination of piercing potential. Bibliography: 17 references.

P. S.

Card 2/2

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNICIT, N.K.

PHASE I BOOK EXPLOITATION SOV/5559

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1959. 243 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Klinov; Tech. Ed.: I.F. Kutsalo; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, N.V. Ageyev, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Oding, I.N. Povlov, and I.F. Zedin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

COVERAGE: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as Cr, Mo, and V on the heat-resisting properties of various alloys are studied. Deformability and workability of certain metals as related to the thermal conditions are the object of another study described. The problem of hydrogen embrittlement, diffusion and the deposition of ceramic coatings on metal surfaces by means of electrophoresis are examined. One paper describes the apparatus and methods used for growing monocrystals of metals. Boron-base metals are critically examined and evaluated. Results are given of studies of intermetallic bonds and the behavior of atoms in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

Lashko, N.F., E.M. Klyuyeva, and E.N. Gorshkova. EI 736 Austenitic Steel 19

Shinyaki, F.F., S.A. Shershova, G.Ye. Noskalenko, E.E. Kreyich, and E.E. Lebedinskiy. EI696 and EI 696 Heat-Resistant Corrosion-Resistant Steel 25

Glushko, I.N.I. On the Mechanism of Stress Relaxation in Austenitic Steels 32

Klinov, V.A., A.A. Platonova, E.M. Feldshtein, and L.K. Shishov. The Effect of Thermal Stresses on Short-Time, Long-Time, and Vibration Strength of Alloys 39

Tyutina, K.I. Acceleration of Aging Cycles of EI 481 Heat-Resistant Austenitic Steel 42

Bychkov, Ya.F., A.F. Klinov, and A.F. Popkova. The Effect of Alloying on the Longitudinal Modulus of Elasticity of Firesteln 50

Pivnik, K.M. Experimental Study of the Mechanism of Deformation of Nickel-Base Alloys 55

Zasedin, I.A., and I.F. Zedin. The Effect of Complex Alloying With Vanadium, Chromium, and Tungsten on the Plastics of Hardness Changes in the Annealing of Cold-Worked Ferrite 68

Arakin, N.I. On the Problem of Studying the Kinetics of Structural Change and Properties in One Specimen Within a Wide Temperature Range 73

Minkin, I.P. On the "Angular" Relationship Between the Structure and Properties of Intercrystalline Boundaries. 78

Levin, B.M., B.M. Pivnik, V.S. Kuliyeva, and B.E. Grinberg. Structure and Properties of Nickel Alloys under the Long-Time Action of High Temperature 90

Chernykh, A.F., I.D. Kolomeyets, and N.I. Nikl'. The Effect of Hydrogen on Creep Strength of Certain Steels 98

Lagutkin, I.F., and V.N. Svyatoslavov. Creep Strength of Steam Superheating Pipes of Austenitic Steel in a State of Complex Stress 107

Lagutkin, I.F., and L.I. Fridkin. Effect of Temperature Variations on Creep Strength of 12 KhMF Steel 113

Petrov, V.V., V.A. Ignatova, and N.A. Shvedchikova. Study of Hydrogen Embrittlement of Low-Carbon Steels 119

Voronkov, V.S. Artificial Aging of the EI437 Alloy under Cyclic Loads 126

Fridkin, I.I., and I.A. Parlov. Study of Fine Structures of Aluminum-Magnesium and Copper-Nickel Solid Solutions 131

Pivnik, K.M. Regularities of the Thermokinetic Change in Austenite and the Problem of the Development of New Alloys 137

Lebedev, V.A., E.K. Marinets, and A.I. Yefremov. Study of the Endurance Limit of Metals by Means of Registering the Fatigue Curve 143

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

ACCESSION NR: AP4029835 S/0279/64/000/002/0110/0116

AUTHOR: Stepanov, V. P. (Moscow); Pridantsev, M. V. (Moscow); Kernich, N. K. (Moscow)

TITLE: On the extra-axial liquation inhomogeneity in chrome-nickel alloy ingots

SOURCE: AN SSR. Izv. Metallurgiya i gornoye delo, no. 2, 1964, 110-116

TOPIC TAGS: chrome nickel alloy, alloy ingot, ingot structure, structure inhomogeneity, Kh20N80 alloy, segregation inhomogeneity, KhN77TYuR, KhN77TYu

ABSTRACT: This paper presents results of a study of the effect of some alloying elements on the formation of off-center segregation inhomogeneity in chromium-nickel and iron-chromium-nickel base alloys, as well as the chemical composition and microstructure of the segregation zones. The authors studied the effects of boron in Kh20N80 alloy in which off-center segregation does not arise under any condition; the effects of titanium and aluminum, separately and jointly, in both Kh20N80 and on KhN35VTYu alloys; the effects of niobium and carbon in KhN77TYuR alloy. The results are presented in a table, with photomicrographs of the microstructure of the segregation zone in the KhN77TYuR and KhN77TYu alloys. The

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ACCESSION NR: AP4029835

authors drew the following conclusions: 1) the tendencies of steels and alloys to form off-center segregation inhomogeneity in ingots is determined by their chemical composition, 2) a smaller segregation inhomogeneity in ingots can be obtained by decreasing the content or totally eliminating certain elements such as titanium, aluminum, and boron from the alloy and by introducing new elements that may bind the segregation elements into compounds at an early crystallization stage, 3) in chromium-nickel base alloys containing titanium and aluminum, a decrease in the segregation inhomogeneity can be obtained by adding a specific amount of niobium. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 29Apr63 ENCL: 00 SUB CODE: MM

NO REF SOV: 011 OTHER: 001

Card 2/2

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNICHNYY, B. [Kernychnyi, B.]

Realization of dreams ("Toward a dream" by B.Liapunov. Reviewed by B.Kernychnyi). Znan.ta pratsia no.2:20 F '59. (MIRA 12:10)

(Interplanetary voyages)
(Liapunov, B.)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KHLEB, V. M.

Dialysis

Clinical applications. (Reviewer: S. V. Davidenkov). Sov. med., 15, No. 11, 1951

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNITSKAYA, N.S.

Total rectal prolapse, rectal rupture, and prolapse of the small intestines and mesentery through the anal canal. Nov.khir.arkh. no.1:64-65 Ja-F '58 (MIRA 11:11)

1. Kozlovskaya rayonnaya bol'nitsa Ternopol'skoy obl. Adres avtora: Kozlov, Ternopol'skoy obl., rayonnaya bol'nitsa.
(INTESTINES—DISEASES)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNITSKAYA, N.S.

Recurrent perforation following aspiration treatment of a perforative peptic ulcer. Nov. khir. arkh. no.2:120-121 Mr-Ap '60. (MIRA 14:11)

1. Khirurgicheskoye otdeleniye Kozlovskoy rayonnoy bol'nitsy, Ternopol'skoy oblasti. Adres avtora: Ternopol'skaya obl., Kozlovskaya rayonnaya bol'nitsa.
(PEPTIC ULCER)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

PUTILIN, A.S.; RABICHEV, L.Ya.; KIRNITSKIY, L.P.

Noncontact method of causing deep inhibition pulsating hypogenic stimulant). Trudy Kish.gos.med.inst. 13:23-26 '60.
(MIRA 16:2)

1. Laboratoriya kafedry fiziki Kishinevskogo gosudarstvennogo meditsinskogo instituta.
(INHIBITION) (SLEEP)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNOGA, Viktor Vasil'yevich; PEKELIS, G.B., red.; BARABANOVA, Ye., red. izd-va; ATLAS, A., tekhn. red.

[Efficient construction of rural electric power transmission lines] O ratsional'nom postroenii sel'skikh linii elektroperedachi. Minsk, Izd-vo Akad. nauk BSSR, 1962. 44 p. (MIRA 15:5)

(Rural electrification)
(Electric power distribution)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNOHA, W.W.

Dynamic of load increase as a factor in the design of rural transmission and distribution networks. Energetyka Pol 16 no.11: 344-346 N '62.

1. Bialoruska Akademia Nauk, Minsk.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNOS, D. P.

and D.A.Harin: "Principle Apparatuses for Seismological Stations in the USSR."

SO: Soviet Academy of Science Proceedings, No.6, March Issue 1955; A-40687.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERNOS, Yu.D.; BRODSKAYA, N.I.; TEODOROVICH, V.P.

Comparative absorption characteristics of swampy ores of Leningrad Province, the Tukan deposits and industrial by-products of the Sterlitamak Soda Plant. Gaz.prom.no.10:9-13 O '56. (MLRA 9:10)
(Gases) (Sulfur) (Absorption)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

S/195/60/001/002/005/010
B004/B067

AUTHORS: Moldavskiy, B. L., Kornus, Yu. D.

TITLE: Catalytic Oxidation of Butylenes to Maleic Anhydride in the Vapor Phase

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 2, pp. 267 - 273

TEXT: The present paper was read at the Conference on Organic Catalysis, November 19, 1959. After giving a review of Western publications concerning the catalytic oxidation of butylenes to maleic anhydride, the authors describe their own experiments. The industrial butylene fraction which is obtained by dehydrogenation of n-butane and consists of 25% butene-1, 54% butene-2, 3% isobutylene, 8% divinyl, and 10% C_2 and C_3 hydrocarbons, was used as initial product. Some experiments were made with an enriched mixture of butene-1 and butene-2 which was obtained by dehydrating the corresponding primary and secondary n-butanols. Besides, experiments with 90% divinyl were made. The reaction mixture consisted of 1.5% butylene and air. The following catalysts were used: 1) Mo - Co catalyst (1 : 1), produced by mixing ammonium paramolybdate with cobalt

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nitrate and by annealing the precipitated cobalt molybdate at 490°C; 2) Mo - Co - B catalyst (1 : 1 : 1.6), produced in the same way as 1) with an addition of H_3BO_3; 3) Mo - Co - P catalyst (1 : 1 : 0.5), produced in the same way as 1) with an addition of H_3PO_4 and kieselguhr as carrier; 4) V - P catalyst (1 : 1) from ammonium metavanadate, phosphoric acid, and kieselguhr; 5) Mo - V catalyst (1 : 10 and 1 : 0.3), produced by impregnating kieselguhr with the ammonium salts of the corresponding acids; 6) Mo - V - Ti catalyst (1 : 0.6 : 2), produced in the same way as 5) with an addition of metatitanic acid and with kieselguhr or pumice as carrier; 7) Co - Cr catalyst (1 : 1), produced by reaction of the corresponding salts; 8) Co - W catalyst (1 : 1), produced in the same way as 7); 9) Co - P catalyst (1 : 1), produced in the same way as 7). Results are given in Table 2. The analytical data were converted to maleic acid. The following was found: Besides maleic aldehyde, considerable amounts of CO and CO_2, carbonyl compounds and volatile aliphatic acids were formed on all catalysts. The optimum content of maleic anhydride in the reaction product obtained with the best catalysts was 35 - 50 mole%. Higher yields (up to 73.3%) were obtained

Card 2/4

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROGLU, L.A., inzh.

Regularity of urban bus service and means for increasing it.
Trudy MADI no.24:145-153 '58. (MIRA 11:12)
(Motorbus lines)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROGLU, Lidiya Aleksandrovna; KOVRIZHNYKH, L.P., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Study of the traffic capacity of automobile roads] Issledovanie propusknoi sposobnosti avtomobil'nykh dorog. Moskva, Avtotransizdat, 1963. 60 p. (MIRA 17:2)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROGLU, L.A., inzh.; SIL'YANOV, V.V., inzh.

Constructing an additional lane on ascending roads. Avt. dor. 28 no.2:5-6 F '65. (MIRA 18:6)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

dom 31, kv.7)

Abstracts of articles received by the editors. Ortop., travm.i protez. 24 no.9:48-49 S '63. (MIRA 17:4)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. K.S.Keropian) pediatricheskogo fakul'teta krymskogo meditsinskogo instituta (rektor - dotsent S.I.Georgiyevich).

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KERDJIAN, K.S., prof. (Simferopol')

Brief report on the work of the Crimean Society of Surgeons in 1957.
Nov.khir.arkh. no.3:128-130 My-Je '58 (MIRA 11:9)
(CRIMEA--SURGERY--SOCIETIES)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPIAN, K.S., prof. (Simferopol', Krymskoy obl., ul. Gor'kogo, d.31, kv.7); IVANOV, G.I., kand.med.nauk

Echinococcosis of the spine. Ortop., travm.i protez. no.9:25-30 '64. (MIRA 14:10)

1. Iz kliniki gospital'noy khirurgii (zav. - prof. K.S. Keropian) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta (dir. - dots. S.I. Georgiyevskiy).
(SPINE--HYDATIS)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KIRO'LAD, Ye.T.

Oxygen in the treatment of dysentery. Sov.med. 21 Supplement:8 '57. (MIRA 11:2)

1. Iz kliniki infektsionnykh bolezney Kubanskogo meditsinskogo instituta.
(OXYGEN--THERAPEUTIC USE) (DYSENTERY)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

[illegible], Ye., ophthalmologist

[illegible] above Pamir-Alay spurs. Kryl.rod. 13 no.7 [illegible] '64. (MIRA 18:4)

(Pushanba region--dilating and scarring)

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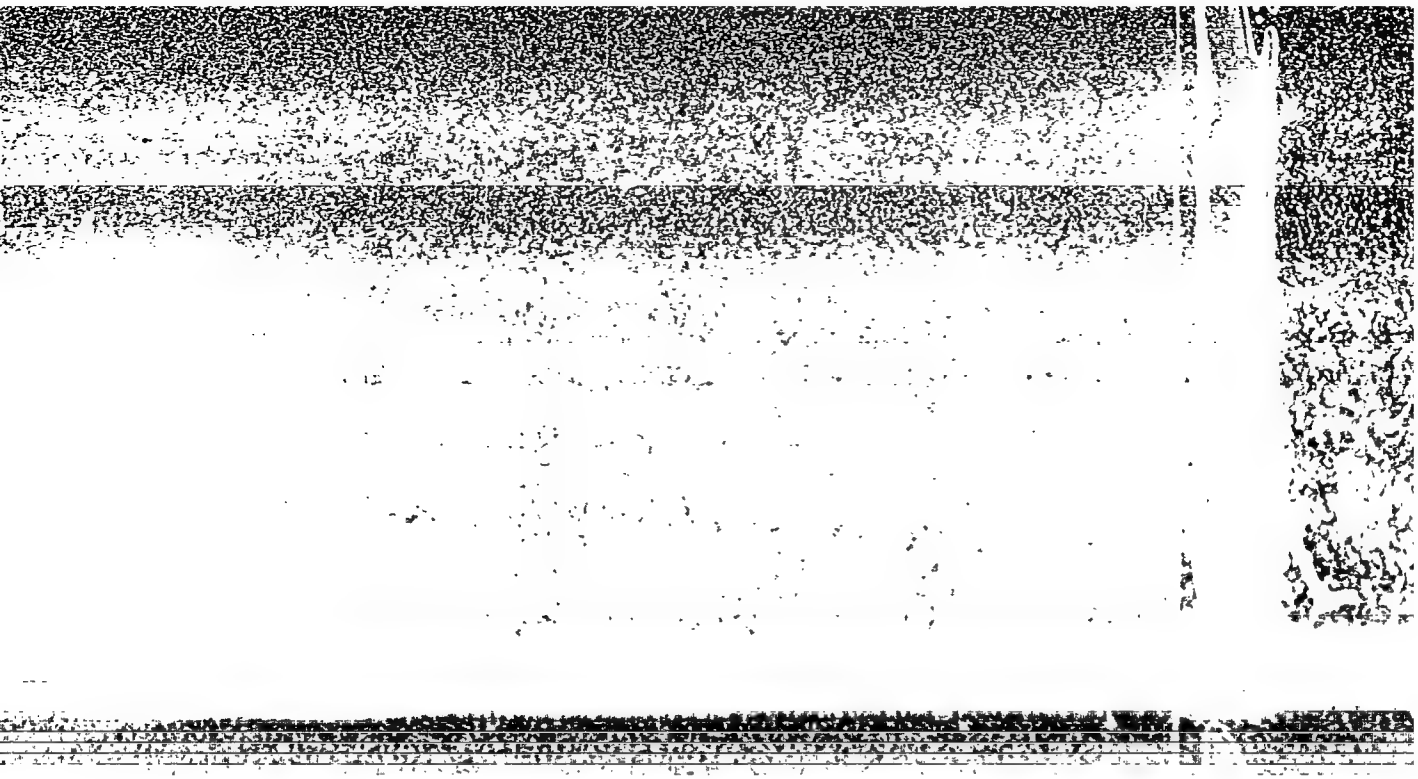

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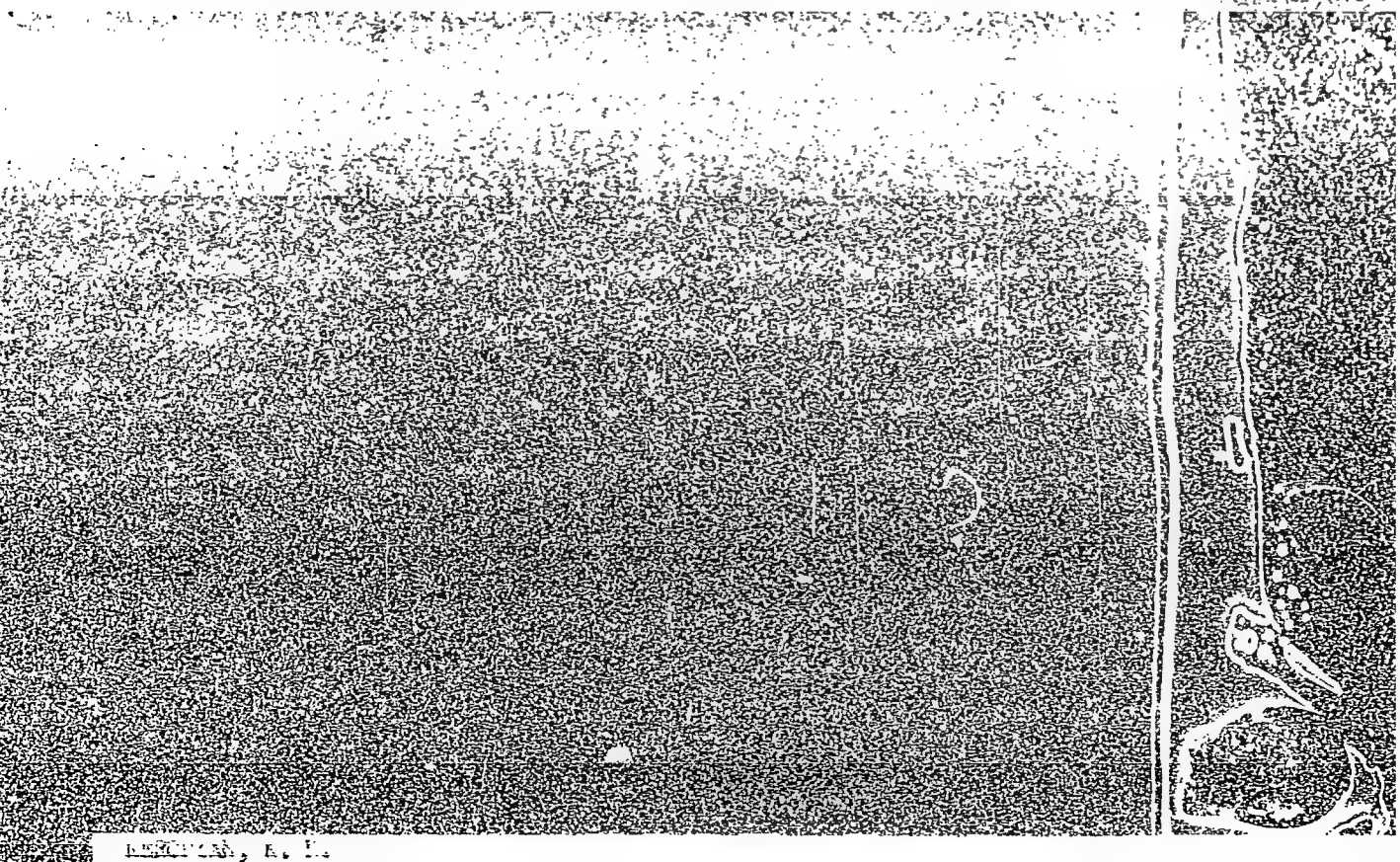

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

144 [illegible]KSIYAN, K. K. Kolebaniya i vliba trigovoy arki bol'shoy kriv[illegible]ny. trudy Krasnodarsk. in-ta pishch. prom-sti, vyp. 5, 1949, s. 93-101.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K. K.

21693 KEROPYAN, K. K. Teploperedacha v usloviyakh nestatsionnarnogo teplovogo p pol'ya (sokr. tekst kekst. kand dissertatsii) Krasnodarsk. in-ta pishch prom-sti, vyp 5, 1949, s. 113-136 - Bibliogr: 6 nazv.

Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K.

Electric model for solving systems of linear algebraic equations. Izv. vys. ucheb. zav.; elektromekh. 5 no.2:136-139 '62. (MIRA 15:3)

(Linear equations) (Electric network analyzers)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K., doktor tekhn. nauk, prof.; CHEGOLIN, P.M., kand. tekhn. nauk, dots.; LUZHIN, O.V., kand. tekhn. nauk, dots. nauchnyy red.; BORODINA, I.S., red. izd-va; BEGAK, B.A., red. izd-va; MOCHALINA, Z.S., tekhn. red.

[Use of electric models in structural mechanics] Elektricheskoe modelirovanie v stroitel'noi mekhanike. Moskva, Gosstroiizdat, 1963. 389 p. (MIRA 16:5)
(Electromechanical analogies)
(Strains and stresses)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

S/271/63/000/003/021/049
A060/A126

AUTHORS: Keropyan, K.K., Korol'kova, V.A.

TITLE: On a method of electrical simulation of plane movable frames

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 3, 1963, 6, abstract 3B32 (Tr. Rostovsk. inzh.-stroit. in-ta, 1961, no. 23, 49 - 70)

TEXT: A new method is proposed for solving problems of electrical simulation of movable frames. The method is based on the application of well-known in their mechanics approximate methods of analysis for the preliminary determination of the displacement of the frame nodes with the subsequent introduction of these nodes into the electrical simulation circuit in the form of emf imitating the angles of intersection of the struts. The proposed method is illustrated by examples of analysis of single-level plane multi-span frames with varied strut attachment; by the simulation of monotonic symmetrical multi-level, multi-span frames bearing a wind load, and by the simulation of plane movable multi-level frames. Expressions are cited for estimating the errors in the values of the

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On a method of electrical simulation of plane ....

moments acting at the ends of the struts on account of errors in the determination of angles. The experimental results are presented of a verification of the described method in the analysis of several plane movable frames taking horizontal loads, using the simulator EMCC-5 (EMSS-5). There are 9 figures and 6 tables.

I. V.

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

S/271/63/000/003/031/049
A060/A126

AUTHOR: Keropyan, K.K.

TITLE: Electrical simulator for solving systems of linear algebraic equations with arbitrary matrix, satisfying the Gauss-Zeydel convergence conditions

PERIODICAL: Referativnyy zhurnal. Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 3, 1963, 17, abstract 3B91 (Tr. Rostovsk. inzh.-stroit. in-ta, 1961, no. 23, 3 - 14)

TEXT: The author describes an electrical simulator for a system of algebraic equations written in matrix form $Ax = b$. The electrical simulator consists of an impedance grid, non-analog with respect to the given system of equation, and which makes it possible to solve the system with an asymmetric matrix of coefficients a_{ik}, satisfying the Gauss-Zeydel convergence conditions: $\sum \frac{|a_{ik}|}{a_{ii}} < 1$, $D \neq 0$ being the determinant of the matrix. The matrix A is represented in the form of a sum of two matrices $A = B + \Delta C$, one of which - B -

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

Electrical simulator for solving systems of ....

represents an arbitrarily selected diagonal matrix with equal positive side-coefficients and the main elements equal to 1. The matrix ΔC is called the discrepancy matrix and is calculated with the formula $\Delta C = A - B$. By substituting the second equation in the first, one obtains $(B + \Delta C)x = b$ or $Bx = d$, where $d = b - \Delta C \cdot x$. For the matrix B one constructs a grid of fixed equal impedances inasmuch as the side coefficients are equal to each other. It is analog to the system $Bx = d$ if one considers the matrix d as constant, and is not analog to the original system. The system $Bx = d$ is reduced to the system $Ax = b$ by the method of successive approximations. In practice, when the convergence conditions are fulfilled, the number of iterations is small (about 5). However, the operator has to carry out tiresome calculations of the quantities d during the process of solving the problem. It is indicated that this operation may be avoided if an iteration unit is connected to the simulator. The example of solving a system of four equations is considered. It is noted that for nondiagonal matrices, when the convergence condition is not satisfied, the solution of the problem has to be carried out by the minimization method.

[Abstracter's note: Complete translation] G.G.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

S/271/63/000/001/044/047
D413/D308

AUTHORS: Keropyan, K.K. and Kholmogorov, N.N.

TITLE: On the solution of building mechanics problems by means of T and P equivalent circuits

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 53, abstract 1B299 (Tr. Rostovsk. inzh.-stroit. in-ta, no. 23, 1961, 87-101)

TEXT: The authors observe that the new ЭМСС-7 (EMSS-7) simulator, built at the computer center of the AS UkrSSR, has recently been applied to the calculation of jointed-rod systems in building practice. An asymmetric Π-type (P-type) circuit analog for a bending bar is taken as the basis of the simulator. Investigations have shown that there is a class of problems in building mechanis that cannot be solved by means of the asymmetric P-type analog circuit because it differs from the mechanical system. An expanded range of problems soluble on the EMSS-1, 5, 6 and 7 simul-

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On the solution ...

ators are assessed. To establish the connexion between the T- and P-type analog circuits, two circuits are considered which simulate a bending bar; Kirchhoff's equations are used to derive the transformation formulas from the parameters of the T circuit to those of the P circuit and vice versa. It is pointed out that the T circuit solves the complete system of canonical equations which embrace almost all problems in building mechanics. The EMSS-5 and 6 simulators are stated to have broader potentialities than the EMSS-7. A detailed analysis is made of the case of constrained torsion of caissons, and the results are given of an experiment carried out using the EMSS-5 and 7 simulators. These check problems have been solved: (1) three-span parabolic arch in flexure; (2) three-span solid beam in constrained torsion; (3) thin-walled three-section casing in constrained torsion. In the analysis of the results attention is drawn to the wider range of the T-type equivalent circuit and the awkwardness of working with the EMSS-7 simulator because of the alternating scale-factor. When the simulators are compared, preference goes to the EMSS-5 and 6 (provided they are further developed). 7 figures. 17 references.
[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

S/271/63/000/003/044/049
A060/A126

AUTHOR: Keropyan, K.K.

TITLE: Electromechanical method of simulating elastic rod systems

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 3, 1963, 77, abstract 3B457 (Tr. Rostovsk. inzh.-stroit. in-ta, 1961, no. 23, 31 - 35)

TEXT: The author gives the description of the analysis method for elastic rod systems by combined simulation of the problem on mechanical and electrical simulators. The method of simulating rod systems by means of geometrically similar analogs did not become widespread on account of the difficulties of a precise determination of the angular deformations of the frame components on the simulated mock-up. The entire process of calculation should be divided between two simulators - an electrical and a mechanical, giving the latter only the task of determining the displacements of the levels of the structure. Having measured the horizontal displacements of the frame levels, the angles of intersection of the struts are determined and they are introduced in the form of emf's

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Electromechanical method of simulating elastic ....

in the electrical simulator, where the entire further calculation is carried out in the usual order. Here the necessity for carrying out an iteration process and for utilizing auxiliary electrical instruments drops out. Two illustrative examples are given: The analysis of a two-span single-level frame and a three-span two-level frame with various strut lengths loaded by two equal forces. There are 2 figures and 2 references.

V. G.

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K., prof., doktor tekhn. nauk, red.; PUKHOV, G.Ye., prof., doktor tekhn. nauk, red.; UGODCHIKOV, A.G., prof., doktor tekhn. nauk, red.; SADETOV, S.Ya., dots., kand. tekhn. nauk, red.; GUNKIN, I.I., assistent, red.; CHEGOLIN, [illegible].M., dots., kand. tekhn. nauk, red. (Minsk)

[Proceedings of the Inter-University Conference on Electric Modeling of Problems of Structural Mechanics, Theory of Elasticity, and Strength of Materials] Trudy Mezhvuzovskoi nauchno-tekhnicheskoi konferentsii po elektricheskomu modelirovaniiu zadach stroitel'noi mekhaniki, teorii uprugosti i soprotivleniia materialov. Pod red. K.K.Keropiana i A.G. Ugodchikova. Novocherkassk, Rostovskii inzhenerno-stroitel'nyi in-t, 1962. 176 p. (MIRA 17:4)

1. Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po elektricheskomu modelirovaniyu zadach stroitel'noy mekhaniki, teorii uprugosti i soprotivleniya materialov. 2d, Rostov-na-Donu, 1962. 2. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut (for Keropyan, Sadetov, Gunkin). 3. Chlen-korrespondent AN Ukr.SSR i Vychislitel'nyy tsentr AN SSSR (for Pukhov). 4. Gor'kovskiy inzhenerno-stroitel'nyy institut (for Ugodchikov).

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPIAN, K. K.

"New Methods for Determining the Major Frequencies of Oscillations of Elastic Systems and Their Application to Problems of the Dynamics of Curved Beams." Dr Tech Sci, Moscow Construction Engineering Inst, Moscow 1954. (RZhMekh, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educatioal Institutions (11)

SO: Sum. No. 521, 2 Jun 55

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K.

124-11-13336

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p 147 (USSR)

AUTHOR: Keropyan, K. K.

TITLE: To the Calculation of Statically Determinate Trusses through an Electrical Analog Simulation Method. (K raschetu staticheski opredelimykh ferm metodom elektricheskogo modelirovaniya.)

PERIODICAL: V sb.: Elektr. modelirovaniye balok i ram. Taganrog, 1956, pp 37-41.

ABSTRACT: Bibliographic entry.

Card 1/1

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

8 (0) SOV/112-59-1-88

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 7 (USSR)

AUTHOR: Keropyan, K. K.

TITLE: Electric Simulators for Some Planar Bar Trusses

PERIODICAL: V sb.: Mezhvuz. konferentsiya po primeneniyu modelirovaniya v elektrotekhn. zadachakh i matem. modelirovaniya. M., 1957, p 170

ABSTRACT: Electrical equivalent circuits are suggested for statically determinate trusses and bent bars.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K., prof, doktor tekhn.nauk

Using electrical analogies in solving statical problems of constrained torsion of thin-walled rods. Trudy RISI no.11: 9-17 '58. (MIRA 13:5)

1. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut
(Elastic rods and wires--Electromechanical analogies).

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K., prof., doktor tekhn.nauk

Electric analyzers for certain flat rod systems. Trudy RISI no.11:27-44 '58. (MIRA 13:5)

1. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut.
(Elastic rods and wires--Electromechanical analogies)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K., prof., doktor tekhn.nauk

Electric analyzer for a flat statically determinate frame.
Trudy RISI no.11:55-62 '58. (MIRA 13:5)

1. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut.
(Structural frames--Electromechanical analogies)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

[redacted], K.K., prof., doktor tekhn. nauk

Using the Wheatstone bridge in solving problems in structural mechanics. Trudy MISI no.6:181-185 '58. (MIRA 12:6)
(Wheatstone bridge)
(Structures, Theory of--Electromechanical analogies)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

SOV/144-58-10-2/17

AUTHOR: Keropyan, K.K., Doctor of Technical Sciences, Professor

TITLE: The Application of Electrical Modelling to the Design of Multi-Span Flat Parabolic Arches with Tie-Bars (Primeneniye elektricheskogo modelirovaniya k raschetu mnogoproletnykh pologikh parabolicheskikh arok s zatyazhkami)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika, 1958, Nr 10, pp 12-17 (USSR)

ABSTRACT: In studies of the application of analogue computers to calculations on the deflection of beams, Professor G.Ye.Pukhov and O.V.Il'yenko have shown that a three-pole equivalent circuit has many applications. In this article it is shown that the three-pole equivalent circuit can serve as an analogue of a flat parabolic arch with tie bars deflected by vertical loading. Expressions for the angular deflections of the end spans of multi-span parabolic arches with tie bars are given in formula of Eq (1). Similar expressions are easily derived for intermediate spans. The equivalent circuit of a single-span flat arch is given in Fig 1B. The

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

The Application of Electrical Modelling to the Design of Multi-Span Flat Parabolic Arches with Tie-Bars

equivalent formulae for the angular deflections are given in Eq (7). Eq (1) and (7) are compared and the electrical equivalents of mechanical design factors are given in Eq (12) to (15) inclusive. The electrical model used differs from that for a straight beam in that it includes a resistance r_x (see Fig 1B) the value of which is given by Eq (8). A particular example of a four-span bridge is then considered and solutions obtained by normal methods and using an analogue computer are compared. The theoretical and experimental results are compared in Table 1 and it will be seen that the difference is less than 2.5%, which is within the limits of experimental error of the model. A photograph of the computer model EMSS-1 is given in Fig 3 and the two main panels are illustrated in Fig 4 and 5. There

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SOV/144-58-10-2/17

The Application of Electrical Modelling to the Design of Multi-Span Flat Parabolic Arches with Tie-Bars

are 5 figures and 4 Soviet references.

ASSOCIATION: Rostovskiy inzhenerno-stroitel'nyy institut (Rostov Civil Engineering Institute)

SUBMITTED: 13th October 1958

Card 3/3

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

SOV/144-59-6-3/15

AUTHOR: Keropyan, K.K., Doctor of Technical Sciences, Professor

TITLE: Design of Plane Single-stage Frames Having Free Nodes by Means of Electrical Analogues

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 6, pp 17 - 24 (USSR)

ABSTRACT: The methods of electrical analoguing of various engineering structures have been successfully employed in the Soviet Union and abroad (Refs 1-6, 8). The first successful method was devised by V.I. Usynin (Ref 5). The author employed the iteration method in conjunction with electrical analogues and found it possible to design a framework having free nodes. The unknown displacements δ of the nodes of each stage were initially assumed to be arbitrary and the resulting deflection angles of the supporting beams were introduced into the analogue in the form of e.m.f.s. Deflection δ' was then obtained, the e.m.f.'s were re-adjusted and a new deflection δ'' was obtained. After about ten iterations, a correct value of δ is obtained. This method is disadvantageous in that it entails a large

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Design of Plane Single-stage Frames Having Free Nodes by Means of Electrical Analogues

number of calculations. The equations for a node C of a framework can be written as Eq (1) (see Ref 7 - p 361), where φ and δ are the unknown deflection angles and linear displacements, respectively. The symbol m in the equation denotes the ends of the beams, which are rigidly fixed to the frame, while p denotes the hinged ends. Further equations for the system are in the form of Eq (2), where m denotes the number of vertical beams which are rigidly fixed at both ends, k is the number of the vertical rods which are hinged at the upper end and p is the number of the vertical rods having hinges at the lower ends. On the basis of Eqs (2), the expression for δ is given by Eq (3), where A is defined by the first equation on p 19. It is possible to design a framework by employing the well-known Cross method in conjunction with a suitable electrical analogue. As an illustration, a single-stage framework is shown in Figure 1 and its equivalent circuit is given in Figure 2a. On the basis of the Cross method, the node moments are first determined under the assumption

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Design of Plane Single-stage Frames Having Free Nodes by Means of Electrical Analogues

that the framework cannot be displaced vertically. The displacement corrections are then introduced and the final moments are evaluated. The design is effected in two stages. Consequently, a two-stage analogue design is also used. First, it is assumed that the system cannot be displaced vertically and an electrical analogue is constructed (Figure 2a). By measuring the voltages across the resistances r_{12} and r_{21} of each three-terminal network representing one of the vertical beams, the reaction R_{1p} is evaluated by employing Eq (3) and assuming that $\delta = 0$. The reaction R_{1p} does not really exist since the frame undergoes a displacement δ_o such that the reaction becomes zero. The displacement can be determined if it is assumed that the horizontal beam (Figure 1) undergoes a displacement $\delta = 1$. The deflection angles can now be evaluated and a new analogue (Figure 2b) is constructed.

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Design of Plane Single-stage Frames Having Free Nodes by Means of Electrical Analogues

The voltages at the terminals of the analogue are measured and a new value of the reaction is determined. It is now possible to construct a graph showing the dependence of the displacement δ on the reaction R_{1p} (Figure 5). The value of δ_o is now easily obtained from the graph. The accurate values of the deflection angles can now be calculated and a new analogue can be devised from which the final values of the moments are found. The method was employed to carry out the design for the framework of Figure 1. The results are given in Tables 1-3. It was found that the discrepancies between theoretical and the measured results were of the order of 5%.
There are 3 figures, 3 tables and 8 references, of which 1 is English and 7 are Soviet.

ASSOCIATION: Rostovskiy inzhenerno-stroitel'nyy institut
(Rostov Building Engineering Institute)

SUBMITTED: March 11, 1959

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

SOV/144-59-11-21/21

AUTHOR: Keropyan, K.K., Professor and Doctor of Technical Sciences

TITLE: An Inter-vuz Scientific Technical Conference on the Use of Analogue Computers in Problems of Structural Mechanics, Strength of Materials and Theory of Elasticity

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 11, pp 138-141 (USSR)

ABSTRACT: The first Inter-vuz Scientific Technical Conference on the use of analogue computers in problems of structural mechanics, strength of materials and theory of elasticity was held from the 21st to 25th September, in the Rostov Constructional Engineering Institute. There were 66 delegates from various research organisations, institutes and design organisations. The work of the conference was divided into three sections: the theory of elasticity; the statics of systems of beams; the dynamics of systems of beams. The plenary session heard a report by Professor G. Ye. Pukhov on the theory and principles of construction of universal modelling circuits consisting of ohmic resistances. A report was read by Professor K.K. Keropyan, who reviewed the work on analogue computers applied to structural engineering in the Rostov Structural

Card 1/6

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

An Inter-vuz Scientific Technical Conference on the Use of Analogue Computers in Problems of Structural Mechanics, Strength of Materials and Theory of Elasticity

Engineering Institute. About ten reports were read in the section on the theory of elasticity, including: the electrical modelling of mathematical transforms for the solution of the plane problem of the theory of elasticity; calculation of the stresses in beams and the twisting of prismatic beams; the use of computers to solve boundary problems in the theory of elasticity; an electrical integrator for the solution of boundary problems; the electrical modelling of three-dimensional contact problems in the theory of elasticity; the use of electrical modelling to solve axially-symmetrical problems in the theory of elasticity and to solve problems on the twisting of beams of variable diameter; solution of elastic problems by electrical modelling of the stress function; investigation of stresses in the structure with an integrator; and the use of continuously-operating machines to solve various boundary problems. At the section on the statics of beam systems, seventeen reports

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An Inter-vuz Scientific Technical Conference on the Use of Analogue Computers in Problems of Structural Mechanics, Strength of Materials and Theory of Elasticity

and two communications were read, including: a model of algebraic equations of the type of a second-order electrical networks; the accuracy of electrical modelling of beam systems; the modelling of certain beam systems by electric circuits built up of quadripoles; the solution of canonical equations of structural mechanics using circuits consisting of quadripoles; calculation of shear strain in systems of beams by electrical modelling; electrical modelling of thin-walled envelopes using the variation method; the use of second-order electrical modelling circuits for solving various systems of linear algebraic and differential equations; several reports on the theory, construction and application of a new analogue computer for use with beam systems; and the electrical modelling of a thin-walled box girder. Four reports were read at the section on the dynamics of beam systems, including determinations of the frequency of oscillation of beam systems using two

Card 3/6

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An Inter-Vuz Scientific Technical Conference on the Use of Analogue Computers in Problems of Structural Mechanics, Strength of Materials and Theory of Elasticity

new models; electrical modelling of free vibrations of thin-walled beams; determination of critical loadings for thin-walled beams in compression and bending; determination of the frequency and wave shape of the natural oscillation of beams on a second-order electrical modelling circuit. The conference concluded that the reports indicated good progress in this subject. The opening of the laboratory on the electrical modelling of problems in structural engineering, strength of materials and theory of elasticity at the Rostov Structural Engineering Institute is an important step in the development of analogue methods in structural engineering. The laboratory has done very useful work. The application of computers to the theory of structures has been actively pursued by the Computer Centre of the Academy of Sciences, Ukr. SSR, and the Kiyev Institute of the Civil Air Lines under the guidance of Professor

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SOV/144-59-11-21/21

An Inter- vuz Scientific Technical Conference on the Use of Analogue Computers in Problems of Structural Mechanics, Strength of Materials and Theory of Elasticity

G. Ye. Pukhov, Doctor of Technical Sciences. Considerable work has been carried out at the Taganrog Radio Technical Institute, the Gor'kiy Constructional Engineering Institute and also in the Riga and Kiyev Polytechnical Institutes, the Moscow Constructional Engineering Institute, the Leningrad Shipbuilding Institute, the Tula Mechanical Institute, the Scientific Research Section of Gidroproyekt and the Scientific Research Institute of Computer Building. The model developed by the Computer Centre of the Academy of Sciences Ukr.SSR, is very efficient, and mass production should be organised. Computers should be developed for teaching and investigation purposes. Further experimental work on the development of new electrical models should be concentrated in the computer centre of the Academy of Sciences USSR in Kiyev, and the construction of an experimental works in Kiyev should be accelerated The publication

Card 5/6

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

An Inter-College Scientific Technical Conference on the Use of Analogue Computers in Problems of Structural Mechanics, Strength of Materials and Theory of Elasticity

of information on the electrical modelling of problems of structural mechanics, the theory of elasticity and strength of materials should be concentrated in the journals Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, and Stroitel'stvo i arkhitektura. Vuz courses should be revised to include information about the use of computing methods in structural engineering.

ASSOCIATION: Rostovskiy inzhenerno-stroitel'nyy institut (Rostov Constructional Engineering Institute)

Card 6/6

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BERNSHTEYN, S.A., prof., doktor tekhn.nauk [deceased]; KEROPYAN, K.K., prof., doktor tekhn.nauk; VILKOV, G.N., red.izd-va; STEPANOVA, E.S., tekhn.red.

[Determining the frequency of vibrations of rod systems by the method of spectral functions] Opredelenie chastot kolebanii sterzhnevykh sistem metodom spektral'noi funktsii. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 281 p. (MIRA 13:5)

(Elastic rods and wires--Vibration)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

31004
S/124/61/000/009/038/058
D234/D303

10.7500

AUTHOR: Keropyan, K.K.

TITLE: Determining frequencies of free vibrations of rod systems with the aid of EMCC-4 (EMSS-4); EMCC-5 (EMSS-5) and EMCC-7 (EMSS-7) models

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 9, 1961, 14, abstract 9 V112 (Tr. 1-y Mezhvuz. nauchno-tekhn. konferentsii po elektr. modelirovaniyu zadach stroit. mekhan. soprotivleniya materialov i teorii uprugosti, B.m., Novocherk. politekhn. in-t, 1960, 161-165)

TEXT: A system of rods with distributed mass (frames with non-displaceable joints) is replaced by a weightless system loaded with point masses. To determine unit displacements by electric simulation, the device EMSS-5 is used. The first eigenvalue is determined from traces of the first and second order of the matrix of elastic displacements. Bilateral estimations of S.A. Bernshteyn

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31004
S/124/61/000/009/038/058
D234/D303

Determining frequencies...

(Novyy metod opredeleniya chastot kolebaniy uprugikh sistem (A new Method of Determining Frequencies of Vibrations of Elastic Systems) M., izd. VIA, 1939) is used. It is "guessed" without justification, that the first two frequencies will be near to each other. This allows obtaining a satisfactory upper estimation. It is remarked that the simulating machine EMSS-7 developed by the computing center of the AN USSR allows similar computation of frames with displaceable joints. [Abstracter's note: Complete translation]

Card 2/2

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9.3230

80072
S/144/60/000/03/004/017
E032/E414

AUTHOR: Keropyan, K.K., Doctor of Technical Sciences, Professor

TITLE: Solution of a System of Linear Algebraic Equations by Electrical Modelling of a Ficticious Beam System

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1960, Nr 3, pp 31-40 (USSR)

ABSTRACT: The present paper is concerned with the use of four terminal networks as models for the solution of various systems of linear algebraic equations including the canonical equations of structural mechanics. The method is based on the replacement of the given system of linear algebraic equations by a ficticious elastic beam system set up in a defined way and representing the main parameters of the equations to be solved. The beam system is then represented by four terminal networks and the potentials at the various points of the model determine the values of the unknowns. The first section is concerned with four terminal networks with reactive components. The following problem is discussed as an example of the suggested analysis. Consider a set of linear equations as defined by Eq (1) which are to be

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E032/E414

Solution of a System of Linear Algebraic Equations by Electrical Modelling of a Ficticious Beam System

solved subject to the single condition that $a_{ik} = a_{ki}$. The system can be represented by a system of elastic beams rigidly pinned together as shown in Fig 2a and by the network shown in Fig 2b. Fig 3 shows a beam system which may be used to solve a system of four linear equations. A further application considered is that of a four terminal network with active components. These representations of linear algebraic equations have been checked experimentally and were found to be satisfactory. There are 6 figures, 1 table and 9 Soviet references.

4

ASSOCIATION: Rostovskiy inzhenerno-stroitel'nyy institut (Rostov Engineering-Building Institute)

SUBMITTED: October 21, 1959

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APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, K.K., prof., doktor tekhn.nauk (Rostov-na-Donu)

Using electric models in studying the structural mechanics of frames.
Issl. po teor. sooruzh. no.10:257-269 '61. (MIRA 14:8)
(Structural frames--Electromechanical analogies)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROPYAN, Kirill Kirillovich, doktor tekhn.nauk, prof.; SELIKHOVA, Klavdiya Dmitriyevna, assistent; GUNKIN, Ivan Ivanovich, assistent

Use of electric simulation for calculating plane rigid frames with inclined elements. Izv. vys. ucheb. zav.; elektromekh. 4 no.3:63-72 '61. (MIRA 14:7)

1. Rostovskiy inzhenerno-stroitel'nyy institut (for Keropyan).
2. Kafedra soprotivleniya materialov Rostovskogo inzhenerno-stroitel'nogo instituta (for Selikhova, Gunkin).
(Electromechanical analogies)
(Structural frames)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

S/144/62/000/002/003/007
D289/D301

9,7000

AUTHOR: Keropyan, Kirill Kirillovich, Doctor of Technical Sciences, Professor (see Association)

TITLE: An electrical model for solving linear algebraic equations

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Elektromekhanika, no. 2, 1962, 136 - 139

TEXT: An electrical model is described for linear algebraic equations with arbitrary matrix, satisfying conditions of convergence. To enable equations with a non-symmetrical matrix to be solved, the author splits the matrix into symmetrical and non-symmetrical auxiliary matrices. For the symmetrical matrix an analog network can be used. To solve the auxiliary matrix, the author gives an arithmetical arrangement which enables an iterative process to be carried out using the values obtained from the analog network. An experimental model is shown designed by the author in 1959, together with G. M. Serkov and D.S. Tsyplova. It was found that the network which was made of ohmic resistors improves the convergence of the iterative

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process for the auxiliary matrix which converges faster the nearer the auxiliary matrix is to the original. The author gives a network diagram for a system of 4 equations and the equations of the parameters involved, also a table of results obtained for the problem after 4 iterations. This is compared with an anlytical solution where 11 iterations were required. For a system of the 8th order an analytic solution required 10 iterations as against 4 by the model technique. There are 2 figures, 2 tables and 1 Soviet-bloc reference.

ASSOCIATION: Kafedra stroitel'noy mekhaniki, Rostovskiy inzhenerno-stroitel'nyy institut (Department of Constructional Mechanics, Rostov Engineering and Constructional Institute)

SUBMITTED: June 6, 1962

Card 2/2

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KARANDAKOV, G.V., aspirant; KEROPYAN, K.K., prof., doktor tekhn. nauk, red.

[Some problems in the theory of calculating rod systems by the electric modeling method; a scientific report] Nekotorye voprosy teorii rascheta sterzhnevykh sistem metodom elektromodelirovaniia; nauchnoe soobshchenie. Rostov-na-Donu, Rostovskii inzhenerno-stroit. in-t, 1963. 38 p. (MIRA 17:9)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

PHASE I BOOK EXPLOITATION SOV/6498

Keropyan, K. K., Doctor of Technical Sciences, Professor, and P. M. Chegolin, Candidate of Technical Sciences, Professor

Elektricheskoye modelirovaniye v stroitel'noy mekhanike (Electrical Analog Computation in Structural Mechanics) Moscow, Gosstroyizdat, 1963. 390 p. Errata slip inserted. 5000 copies printed.

Scientific Ed.: O. V. Luzhin, Candidate of Technical Sciences, Docent; Ed. of Publishing House: I. S. Borodina and B. A. Begak; Tech. Ed.: Z. S. Mochalina.

PURPOSE: The book is intended for design engineers, scientific workers, aspirants, and students concerned with electrical analog computation.

COVERAGE: The fundamental principles of electric-circuit analysis of problems in the strength of materials and structural mechanics developed during the last two decades in the USSR and elsewhere

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are discussed. The results of known investigations in this field are summarized and generalized. Some of these investigations are published for the first time. Certain electric circuits in which the distribution of currents and voltages corresponds to the distribution of the force and deformation parameters in a framework are studied. The arrangement and working principles of the following electrical analog computers used by design organizations are described in chapter 7. 1) The ЭМСС-1, the first electrical network analyzer, was developed and constructed in 1955-56 at the Taganrogskiy radiotekhnicheskiy institut (Taganrog Radiotechnical Institute) by Engineers O. V. Il'yenko and V. I. Usynin, Senior Technician A. A. Filimonov, and Technicians A. F. Yevtushenko and P. A. Tepikin under the supervision of Professor G. Ye. Pukhov, Doctor of Technical Sciences. This computer is used by the РИСИ (Rostovskiy inzhenerno-stroitel'nyy institut -- Rostov [-na-Donu] Construction Engineering Institute). 2) The ЭМСС-2 and ЭМСС-4, which simulate a beam under

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Electrical Analog (Cont.)

flexure along its entire length, were developed at the Laboratoriya elektricheskogo modelirovaniya (Electrical-analog laboratory) of the ВИСИ by K. K. Keropyan; 3) The ЭМСС-5, used to design plane and three-dimensional frameworks, was developed by G. Ye. Pukhov, O. V. Il'yenko, and P. M. Chegolin. The ЭМСС-2, ЭМСС-4 and ЭМСС-5 were constructed at the Taganrog Radiotechnical Institute under the supervision of Candidate of Technical Sciences A. V. Kalyayev. The modernized ЭМСС-5М was shown at an exhibition in 1960; 4) The ЭМСС-6, a modification of the ЭМСС-5, was developed and constructed in 1956 at the Kiyevskiy institut GVF (Kiev Institute of the Civil Air Fleet) by engineers V. I. Usynin, aspirant G. V. Karandakov, Ye. A. Proskurin, and Senior Technician A. I. Filimonov under the supervision of G. Ye. Pukhov; 5) The ЭМСС-7, used for direct simulation of regular movable and stationary plane and three-dimensional frameworks, was developed and constructed in 1959 at the Vychislitel'nyy tsentr (Computation Center) of the Academy of Sciences Ukrainian SSR by Engineers G. V. Karandakov,

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V. Y. Vasil'yev, G. I. Grezdov, and Ye. A. Proskurin under the supervision of G. Ye. Pukhov; 6) The ЭМСС-8, an experimental computer for checking the simulation principles of irregular frames, was developed by K. K. Keropyan and G. Y. Karandakov, and constructed at the Laboratoriya elektricheskogo modelirovaniya (Electrical-analog laboratory) of the РИСИ by G. V. Karandakov, Engineer A. V. Yevtushenko, Laboratory Assistants Yu. N. Yevtushenko and Yu. I. Zaparin under the supervison of K. K. Keropyan. 7) The ЭМДСС-2, a special analog computer, is used to solve dynamic problems of structural mechanics. The fundamental vibration pitch of plane frameworks (with no more than 13 members) can be directly determined with this computer. The computer was developed and constructed at the Taganrog Radiotechnical Institute by M. M. Sukhomlinov, G. Sh. Avetisov, Yu. A. Povalyayev and Ye. M. Aslanov under the supervision of P. M. Cnegolin. The errors in electric-circuit analysis of frameworks are discussed in detail. Valuable comments and instructions for writing this book were given by Professor I. M. Rabinovich, Corresponding

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Electrical Analog (Cont.)

Member, Academy of Sciences USSR, and Honored Scientist and Technologist of the RSFSR, Professor N. I. Bezukhov. There are 109 references: 93 Soviet, 15 English, 1 German.

TABLE OF CONTENTS (Abridged):

Preface 3

Ch. 1. Fundamentals of Electrical Analog Computation 5

Ch. 2. Simulation of the Flexure of a Simple Beam of Constant and Variable Rigidity, of Free and Constrained Torsion, of a Beam Under Combined Transversal and Axial Loading, and of the Flexure of a Beam on a Continuous Elastic Foundation 21

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

flexure along its entire length, were developed at the Laboratoriya elektricheskogo modelirovaniya (Electrical-analog laboratory) of the BMCM by K. K. Keropyan; 3) The EMCC-5, used to design plane and three-dimensional frameworks, was developed by G. Ye. Pukhov, O. V. Il'yenko, and P. M. Chegolin. The EMCC-2, EMCC-4 and EMCC-5 were constructed at the Taganrog Radiotechnical Institute under the supervision of Candidate of Technical Sciences A. V. Kalyayev. The modernized EMCC-5M was shown at an exhibition in 1960; 4) The EMCC-6, a modification of the EMCC-5, was developed and constructed in 1956 at the Kiyevskiy institut GVF (Kiev Institute of the Civil Air Fleet) by engineers V. I. Usynin, aspirant G. V. Karandakov, Ye. A. Proskurin, and Senior Technician A. I. Filimonov under the supervision of G. Ye. Pukhov; 5) The EMCC-7, used for direct simulation of regular movable and stationary plane and three-dimensional frameworks, was developed and constructed in 1959 at the Vychislitel'nyy tsentr (Computation Center) of the Academy of Sciences Ukrainian SSR by Engineers G. V. Karandakov,

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

V. V. Vasil'yev, G. I. Grezdov, and Ye. A. Proskurin under the supervision of G. Ye. Pukhov; 6) The ЭМСС-8, an experimental computer for checking the simulation principles of irregular frames, was developed by K. K. Keropyan and G. V. Karandakov, and constructed at the Laboratoriya elektricheskogo modelirovaniya (Electrical-analog laboratory) of the РИСИ by G. V. Karandakov, Engineer A. V. Yevtushenko, Laboratory Assistants Yu. N. Yevtushenko and Yu. I. Zaparin under the supervison of K. K. Keropyan. 7) The ЭМДСС-2, a special analog computer, is used to solve dynamic problems of structural mechanics. The fundamental vibration pitch of plane frameworks (with no more than 13 members) can be directly determined with this computer. The computer was developed and constructed at the Taganrog Radiotechnical Institute by M. M. Sukhomlinov, G. Sh. Avetisov, Yu. A. Povalyayev and Ye. M. Aslanov under the supervision of P. M. Chegolin. The errors in electric-circuit analysis of frameworks are discussed in detail. Valuable comments and instructions for writing this book were given by Professor I. M. Rabinovich, Corresponding

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Member, Academy of Sciences USSR, and Honored Scientist and Technologist of the RSFSR, Professor N. I. Bezukhov. There are 109 references: 93 Soviet, 15 English, 1 German.

TABLE OF CONTENTS (Abridged):

Preface 3

Ch. 1. Fundamentals of Electrical Analog Computation 5

Ch. 2. Simulation of the Flexure of a Simple Beam of Constant and Variable Rigidity, of Free and Constrained Torsion, of a Beam Under Combined Transversal and Axial Loading, and of the Flexure of a Beam on a Continuous Elastic Foundation 21

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROP'YAN, M.P.; YELINA, A.S.

Stereochemical studies in the series of levomycetin (chloroamphenicol) derivatives. Part 1: Hydrolysis of nitro ethers of threo- and erythro-1-(p-nitrophenyl)-2-acylamino-1, 3-propanediols. Zhur.ob. khim. 31 no.10:3298-3303 O '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Propanediol)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BAKUMSKAYA, Ye.L.; KEROPYAN, V.V.; BERGMAN, A.G.

Ternary system formed by sodium, thallium, and lead sulfates.
Zhur. neorg. khim. 6 no.7:1652-1655 Jl '61. (MIRA 14:7)
(Sodium sulfate) (Thallium sulfate) (Lead sulfate)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BERGMAN, A.G.; BAKUMSKAYA, Ye.L.; KEROPYAN, V.V.

Ternary system of lithium, sodium, and lead sulfates. Zhur.neorg. khim. 7 no.3:621-624 Mr '62. (MIRA 15:3)
(Sulfates) (Systems (Chemistry))

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BERGMAN, A.G.; KEROPYAN, V.V.; BAKUMSKAYA, Ye.L.

Ternary system consisting of lithium, thallium and lead sulfates. Zhur.neorg.khim. 7 no.10:2447-2449 O '62. (MIRA 15:10)
(Lithium sulfate) (Thallium sulfate) (Lead sulfate)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

BAKUMSKAYA, Ye.L.; BERGMAN, A.G.; KEROPYAN, V.V.

System consisting of the sulfates of potassium, thallium, and lead.
Zhur. neorg. khim. 8 no.12:2748-2750 D '63. (MIRA 17:9)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

YUGOSLAVIA

KEROS, Predrag, Department of Anatomy of the Medical Faculty of the University (Zavod za anatomiju Medicinskog fakulteta) Zagreb

"Anatomical Investigations on the Dangers, Sequelae and Prevention of Vocal Cord Paralysis in Thyroid Gland Operations"

Radovi Medicinskog Fakulteta u Zagrebu, Vol 13, No. 3; 1965; pp 237-274; Ibid, Vol 14, No. 1; 1966; pp 69-84.

Abstract [English summary modified]: Theoretical introduction on causes of vocal cord paralysis and clinical data; study of the cause and relations of the recurrent laryngeal nerve to esophagus, trachea, thyroid plexus, Berry's ligament, thyroid gland, phrenic nerve and sympathetic chain in 300 anatomical specimens; length of nerve, loop around subclavian artery, anomalies. Terminal ramifications of the recurrent nerve are described in detail. Surgical implications are discussed. 15 anatomical diagrams, 8 tables, 98 Western, 16 Yugoslav, 1 Soviet reference; including 2 Yugoslav personal communications. Manuscript received 30 October 1965.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

TIVANOVAC, P.; KEROS, P.

Spondylodesis of the lumbar vertebral body and the sacrum with rib transplant. Bul sc Youg 9 no.6:161 D '64.

1. Surgery Department of the Military Hospital, Zagreb, and Anatomic Institute of the Faculty of Medicine, Zagreb. Submitted July 30, 1964.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

MACHIEDO, D.; KEROS, P.

Use of conduction anesthesia in total phlebo-extraction of the vena saphena magna. Acta chir. Iugosl. 12 no.1:57-66 '65.

1. Kirursko odeljenje Vojne bolnice u Zagrebu (nacelnik puk. dr. D. Machiedo) i Anatomski institut Medicinskog fakulteta u Zagrebu (predstojnik prof. dr. J. Krmpotic).

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KEROS, Predrag

Studies of the topographical pattern concerning block anesthesia of the intercostal nerves. Cesk. morf. 13 no.2:181-186 '65

1. Department of Anatomy, Faculty of Medicine, Zagreb, Yugoslavia.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

MACHIEDO, Dusan, dr.; KITOS, Predrag, dr.

Portal hypertension syndrome and possibilities of its surgical therapy. Lijecn. vjesn. 86 no.11:1341-1376 N '64.

1. Iz Kirurskog odjelenja Armijske bolnice u Zagrebu.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721530008-5

KUHOS, Predrag

Contribution to the study of the anterior cranial cavity.
Rad. med. fak. Zagreb 11 no.3:225-244 '63.

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KEROS, Predrag, dr.

Anatomical principles of pericranial conduction anesthesia.
Lijecn. vjesn. 85 no.8:861-867 '63.

1. Iz Anatomskog instituta Medicinskog fakulteta u Zagrebu.
(ANESTHESIA, CONDUCTION) (HEAD)
(ANATOMY)

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YUGOSLAVIA

KEROS, Dr Predrag, Anatomical Institute (Anatomski Institut), Faculty of Medicine (Medicinski Fakultet), Zagreb.

"The Anatomical Basis for the Conduction Anesthesia of the Pericranium."

Zagreb, Lijecnicki Vjesnik, Vol 85, No 8, 1963, pp 861-867.

Abstract: [Author's English summary modified] The soft tissues and bone structure of the head are often the objects of operations under local anesthesia, but neither the classical line from the glabella via the temporal region to the external occipital protuberance nor the modification by LUNDY [full name and affiliation not given] has proved satisfactory. The author proposes a slightly changed course for the classical anesthetic line on the basis of his attempts to block the individual sensory nerves that participate in the innervation of the pericranium on 400 bone preparations and 60 post-mortem sections. Anesthetic fluid should be deposited at certain points along the modified line thus proposed so as to block the nerves innervating the pericranium.

Nine drawings, 12 Western references dating as early as 1921.

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Anesthesiology

YUGOSLAVIA

KEROS, Predrag, Dr; NEVANIC, Djordje, Dr: Institute of Anatomy of the Medical Faculty and the Otorhinolaryngology Department of the Dr. M. Stojanovic Hospital, Zagreb (Anatomski institut Medicinskog fakulteta u Opcoj bolnici "Dr M. Stojanovic" u Zagrebu), Zagreb.

"Studies Relating to the Conduction Anesthesia of the Infraorbital Nerve"

Zagreb, Lijecnicki Vjesnik, Vol 88, No 2, 1966, pp 145-150

Abstract [Authors' summary modified]: The authors concluded that for the determination of the position of the infraorbital opening and the carrying out of a successful blocking of the infraorbital nerve the following facts should be known: the center of the opening is most often 7-8 mm below the infraorbital edge. The center of the infraorbital opening is in almost 70% of the cases on the vertical line passing in front of the middle of the alveolar edge of the second upper premolar. The infraorbital opening is regularly 1-2 mm below the line joining the low lateral angle of the piriform incisure and the point where the lateral canthus approaches the lateral edge of the orbit. The opening is situated, as a rule, at the level of the attached edge of the front end of the inferior concha, from which it is about 17-20 mm away. 4 Yugoslav and 11 Western references. Manuscript received for publication 21 Nov 65.

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Road building machinery. Mekh. stroi. 9, No. 6, 1952

Monthly List of Russian Accessions, Library of Congress, September 1952. Unclassified.

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[Machines for the maintenance and repair of highways and airfields; atlas of designs] Mashiny dlia soderzhaniia i remonta avtomobil'nykh dorog i aerodromov; atlas konstruktsii. Moskva, Mashinostroenie, 1965. 133 p. (MIRA 18:3)

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